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FROM-Praxair, Inc.

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MEMORY TRANSMISSION REPORT

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NAME : Praxair, Inc.

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*** SUCCESSFUL TX NOTICE ***

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September 8, 2006

Facsimile 571.279.8300

TO: Examiner: Jonathan J. Johnson
USPTO

RE: Serial No. 10/570,460
Filed: 09/26/03
Group Art Unit: 1725
Title: METHOD FOR CENTERING A SPUTTER TARGET ONTO
A BACKING PLATE AND THE ASSEMBLY THEREOF

PLEASE SEE ATTACHED RESPONSE TO EXAMINER'S OFFICIAL ACTION

THE INFORMATION CONTAINED IN AND TRANSMITTED WITH THIS FACSIMILE IS CONFIDENTIAL, ATTORNEY WORK PRODUCT, AND/OR SUBJECT TO THE ATTORNEY-CLIENT PRIVILEGE. IT IS INTENDED ONLY FOR THE INDIVIDUAL OR ENTITY DESIGNATED ABOVE. YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION, COPYING, OR USE OF OR RELIANCE UPON THE INFORMATION CONTAINED IN AND TRANSMITTED WITH THIS FACSIMILE BY OR TO ANYONE OTHER THAN THE RECIPIENT DESIGNATED ABOVE IS UNAUTHORIZED AND STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS FACSIMILE IN ERROR, PLEASE NOTIFY THE SENDER BY TELEPHONE IMMEDIATELY AND RETURN THE DOCUMENT BY U.S. MAIL. YOU WILL BE REIMBURSED FOR LONG-DISTANCE TELEPHONE CHARGES AND POSTAGE UPON REQUEST. THANK YOU FOR YOUR COOPERATION.

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F-690



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,460	09/26/2003	Joseph C. Facey	CS-21,294	7390
27182	7590	03/10/2006		
PRAXAIR, INC. LAW DEPARTMENT - M1 557 39 OLD RIDGEBURY ROAD DANBURY, CT 06810-5113				
EXAMINER JOHNSON, JONATHAN J				
ART UNIT		PAPER NUMBER		
1725				

DATE MAILED: 03/10/2006

REC'D MAR 14 2006

Please find below and/or attached an Office communication concerning this application or proceeding.

OFFICIAL ACTION
NORMAL TERM EXPIRES 6-10-06
STATUTORY DUE DATE 9-10-06

Office Action Summary**Application No.**

10/670,460

Applicant(s)

FACEY ET AL.

Examiner

Jonathan Johnson

Art Unit

1725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.138(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 11-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☒ Claim(s) 9 and 10 is/are objected to.
- 8) ☒ Claim(s) 1-20 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-848) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>9-26-03</u> . | 6) <input type="checkbox"/> Other: _____ |

Application/Control Number: 10/670,460
Art Unit: 1725

Page 2

DETAILED ACTION

Election/Restrictions

Applicant's election of Group Ia, Claims 1-10 in the reply filed on 1-20-06 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Drawings

The drawings are objected to because:

- 1) feature C is not shown but is listed in paragraph 37 in the specification and
- 2) the correct location of feature A is not shown but listed in paragraph 37 as described in the specification; and
- 3) the ridges in the notch (10) of the sputter target (4) vis a vis the flange (8) of the backing plate (6) because the ridges cannot fit inside the flange of the backing plate.

Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from

Application/Control Number: 10/670,460

Page 3

Art Unit: 1725

the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Qamar (US 5,009,765). Qamar teaches a method for forming a solder bonded sputter target/backing plate assembly forming a backing plate with a bonding surface having at least two spaced-apart peripheral flanged segments disposed on the bonding surface of the backing plate (figure 8, items 80 and 40); b) forming a sputter target having a sputter surface and at least two peripheral notched segments on the bonding surface and said notched segments adapted for aligning with the flange segments (figure 8, item 10); c) applying a solder material to the interface spacing defined by superimposing and aligning said sputter target on the backing plate and said flange

Application/Control Number: 10/670,460

Page 4

Art Unit: 1725

segments having a height thickness larger than the depth thickness of the notched segments (col. 5, ll. 5-15); and d) allowing said solder material to solidify and bond the sputter target to the backing plate (col. 5, ll. 5-15); wherein the backing plate and sputter target are disc-shaped (figure 1); wherein the flange segments form a single arcuate-shaped flange and the notched segments form a single arcuate-shaped notch (figure 8, items 10 and 40); wherein the sputter target is selected from the group comprising titanium, aluminum, copper, molybdenum, cobalt, chromium, ruthenium, rhodium, palladium, silver, osmium, iridium, platinum, gold, tungsten, silicon, tantalum, vanadium, nickel, iron, manganese, germanium, and alloys thereof and the backing plate is selected from the group comprising copper, aluminum, titanium, and alloys thereof and the backing plate is selected from the group comprising copper, aluminum, titanium, and alloys thereof (col. 5, ll. 35-45).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:


(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Qamar (US 5,009,765). Qamar does not teach the claimed ranges, however, Qamar does teach the desirability of effectively soldering the target to the backing plate (col. 5, ll. 5-15) using substantially the same process as applicants. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify dimensions to utilize the claimed dimensions in

Application/Control Number: 10/670,460
Art Unit: 1725

Page 6

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jonathan Johnson
Primary Examiner
Art Unit 1725

jj

[illegible]

Notice of References Cited

Application/Control No.

10/670,460

Applicant(s)/Patent Under
Reexamination
FACEY ET AL.

Examiner

Jonathan Johnson

Art Unit

1725

Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-5,687,600	11-1997	Emigh et al.	72/69
*	B	US-5,230,462	07-1993	Vascak et al.	228/222
*	C	US-5,143,590	09-1982	Strothers et al.	204/298.12
*	D	US-5,009,765	04-1991	Qamar et al.	204/298.12
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
 Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.